

Due Friday, May 18th

A tangram is a Chinese puzzle that is made up of seven geometric shapes, called tans. The objective of the puzzle is to form specific shapes using all seven pieces without the pieces overlapping.

I. Create your own tangram using the Tangram Template

1. Label the entire 4 x 4 square ABCD.
2. Draw the diagonal BD.
3. Locate the midpoint of BC, label it E.
4. Locate the midpoint of CD, label it F.
5. Draw EF. Label its midpoint G.
6. Draw AG and label the point where it intersects BD, H.
7. Locate the midpoint of BH, label it I.
8. Draw GI.
9. Locate the midpoint of DH, label it J.
10. Draw JF. **Carefully**, cut out the square and along the lines you have drawn to create your 7 tans.

II. Questions

1. What are the seven geometric shapes? 5 _____, 1 _____, 1 _____
2. Name two things that are special about all of the triangles? _____, _____

If the side of each square outlined on the Tangram Template is one unit, answer the following.

3. What is the area of the square? _____
4. What is the area of the parallelogram? _____
5. What is the area of the medium-sized triangle? _____
6. What is the area of one of the largest triangles? _____
7. What is the perimeter of one of the largest triangles? _____ (**exact** answer, do not round)
8. What is the perimeter of the parallelogram? _____ (**exact** answer, do not round)
9. Make a triangle with the square and the two smallest triangles. What is the area of this triangle? _____
10. What is the area of the entire tangram (all 7 pieces put together)? _____

III. Create your own tangram puzzle → Give it a name (what is your puzzle)? _____

Rules: 1. Use all seven tans

2. Lay them flat without overlapping

3. Each piece must touch another.

There are examples on the back of this sheet, or you can make up your own, but either way, name it.

* Tape your final tangram puzzle together, or glue it on to another sheet of paper.

Grading Rubric

FINAL GRADE: _____

I. Created the seven tans correctly

(30 points) _____

*10 points per school day will be

II. Questions

(20 points) _____

deducted, if the project is late.

III. Tangram Puzzle

a. Followed the three rules

(10 points) _____

b. Named your puzzle

(5 points) _____

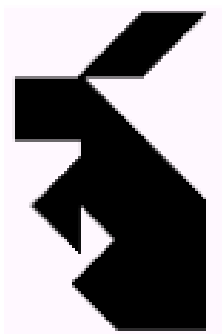
c. Creativity/Neatness/Coloring

(10 points) _____

d. Overall Puzzle

(25 points) _____

Examples: bunny



swan



eagle



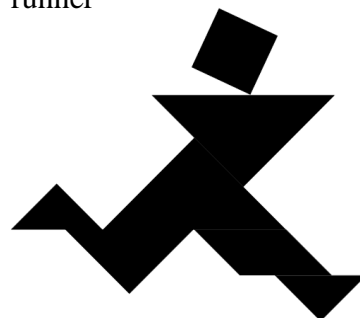
sitting cat



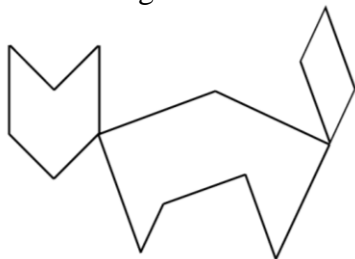
dancer



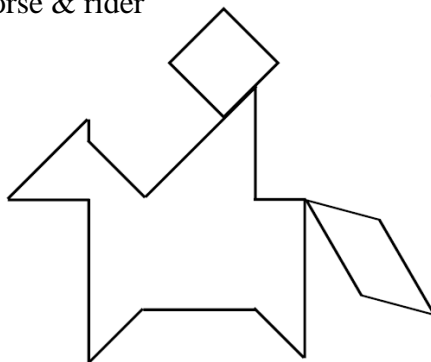
runner



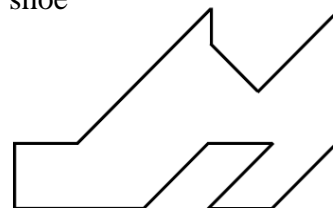
standing cat



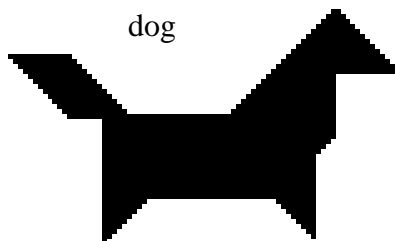
horse & rider



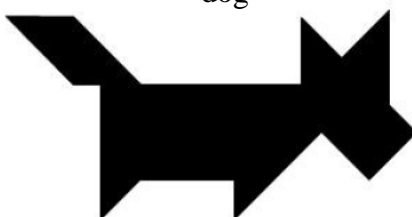
shoe



dog



dog



person sitting

